Draft July 22, 2019

ULWQS Science Panel Meeting #5 July 10-11 Action Items

I. Utah Lake Mass-Balance

- 1. Develop proposed methodology for updating the Utah Lake mass-balance Mike B. and Scott D. (and others as appropriate); August 9
- 2. Share draft methodology with Science Panel for review and comment Scott D.; August 9
- 3. Finalize methodology based on comments Mike B. and Scott D.; August 23
- 4. Conduct mass-balance analysis TBD

II. Atmospheric Deposition

AD White Paper Finalization

- 5. Review and provide any questions or comments on the white paper Science Panel; July 26
- 6. Address any comments and finalize white paper Janice B.; August 2
 - Add tables (summaries of other analyses) to the white paper when addressing comments
- 7. Share final white paper Janice B.; August 2

Short-term Need for Purposes of Moving Forward with Modeling

- 8. Write up a "recommendation on the use of deposition data in the existing U of U model and the related mass-balance analysis" for a Science Panel survey (building on review of the draft white paper) Mike B.; August 2
- 9. Send out survey to assess Science Panel support for recommendation Facilitation Team; August 6
- 10. Respond to survey Science Panel; August 13

WFWQC AD Study Proposal

- 11. Follow-up with Theron to provide update on Science Panel conversations/next steps related to the WFWQC proposal(s) Mitch H.; COMPLETED
- 12. Update and share draft memo regarding WFWQC proposal with other Science Panel members Mitch H./Janice B.; COMPLETED
- 13. Review and provide comments and/or questions on the memo on WFWQC proposal Science Panel; July 26
- 14. Address any comments, finalize memo, and share with Theron Mitch H./Janice B.; August 2
- 15. Review memo, pose questions back as necessary, and then re-write the proposal(s) Theron M.; August 9
- 16. Review revised WFWQC proposal(s) and share any final comments Science Panel; August 16
- 17. Assess need for and then, as appropriate, engage outside experts on external review Science Panel; TBD
- 18. Finalize WFWQC Study Plan and initiate studies Theron M.; TBD

III. Framework Document

- 19. Share working draft Framework (specifically Section 2.0) for feedback Tetra Tech; August 23
- 20. Provide feedback on Framework Science Panel; August 30

Draft July 22, 2019

IV. Conceptual Models

21. Reach out to U of U team to incorporate WASP and EFDC box-arrow diagrams – Scott D and Mike P.; July 26

- 22. Mark up the Ecosystem Model (e.g., draw boxes/polygons on Ecosystem Model) and share with Mike Paul Jereme G.; August 2
- 23. Share comments on the conceptual model narratives Science Panel; August 2

V. Analysis Plan

Food web recycling of nutrients

- 24. Send carp calculations to Science Panel for QA/QC Mike P.; July 26
- 25. Provide QA/QC review of carp calculations Science Panel; August 2
- 26. Estimate P excretion rates for phytoplankton and zooplankton Mike P.; August 9

Water Quality Analysis [all by July 26]

- 27. Discriminate water quality data by site location Mike P.
- 28. Look at modal vs. non-modal Mike P.
- 29. Re-make correlation matrices and taxa boxplots for Provo Bay Mike P.
- 30. Fix the legends from the Data Explorer information Scott D. and Mike P.
- 31. Fix the data plots from spatial overview Mike P.
- 32. Provide comments on additional analyses of cell count and chl a data/analyses Science Panel
- 33. Provide comments on additional analyses or pigment analyses Science Panel
- 34. Compare light extinction in WASP and EFDC with results based on computation of PAR observations Scott D. and Mike P.
- 35. Talk to Jereme about data for carp/macrophytes, etc. Scott D. and Mike P.
- 36. Call Soren/Janice to discuss env. requirements for diatoms and extant macrophyte species (and graduate student work being initiated) Mike P.

Sediment Shear Stress

- 37. Follow-up with Nick VS on shear stresses, attempt to develop a map of shear stress estimates around the lake Mike P.; July 26
- 38. Provide papers on carp bioturbation in lakes (Mike B. already sent some) Science Panel; August 2

VI. Strategic Research Plan

- 39. Develop draft Strategic Research Plan and share with the Science Panel for review Mike P.; TBD
 - Consider need to look at bioavailability of SRP in UL utilizing the molybdate reactivity test

VII. Science Panel Miscellaneous

40. Assess need for Provo Bay to have its own numeric criteria (and pose to SC if appropriate) – Science Panel; TBD

VIII. Near-term Work Plans

41. Compile comments submitted on the three near-term work plans – Scott D.; August 3

Draft July 22, 2019

Sediment Equilibrium

42. Send list of specific questions for development of Sediment work plan – Greg C. and Ramesh G.; COMPLETED

43. Review Sediment work plan with questions in mind – Science Panel; July 26

Bioassay

- 44. Send photos of lid/screen to avoid/prevent light inhibition to Zach A. Hans P.; COMPLETED
- 45. Touch base with Zach on bioassay work plan Scott D.; COMPLETED
- 46. Circulate a revised work plan for the Panel's information and a draft SAP for review Zach A.; July 26

IX. DWQ Actions

- 47. Address issues identified with the Utah Lake Data Explorer as necessary,—Scott D. (with Mike P.); July 26
 - Include a pairwise plot of nitrogen species and chlorophyll a
- 48. Look into DWQ methodology for lab analyses Scott D. and Erica G.; July 26
- 49. Review Utah Lake Sampling Analysis Plan to verify PAR collection methods meet the data quality objectives Scott D. (with Mike P.); July 26
- 50. Review PAR sample collection methods to confirm appropriate depth resolution Scott D.; July 26
- 51. Evaluate timing of modeling workshop with U of U team Scott D.; TBD